



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>SEVERE</b>
FLUID CONDITION	<b>ABNORMAL</b>

Machine Id  
**JOHN DEERE 318G 1T0318GAPLJ386793**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0201463</b>	JR0176870	JR0160598
Sample Date		Client Info		<b>04 Jan 2024</b>	08 Aug 2023	28 Mar 2023
Machine Age	hrs	Client Info		<b>4115</b>	3540	3058
Oil Age	hrs	Client Info		<b>575</b>	482	422
Filter Age	hrs	Client Info		<b>575</b>	482	422
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>SEVERE</b>	ABNORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>21</b>	23	17
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>7</b>	8	5
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>26	<b>2</b>	2	2
Tin	ppm	ASTM D5185m	>4	<b>2</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

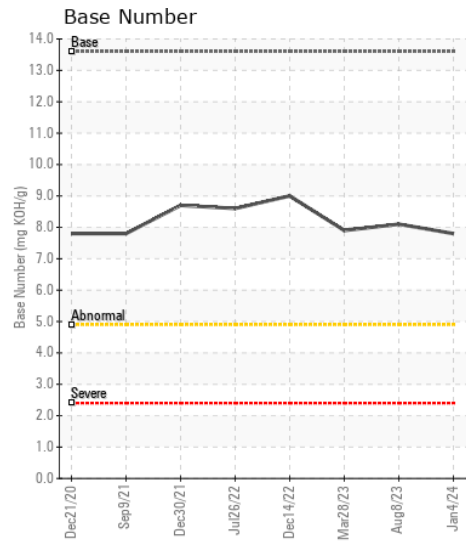
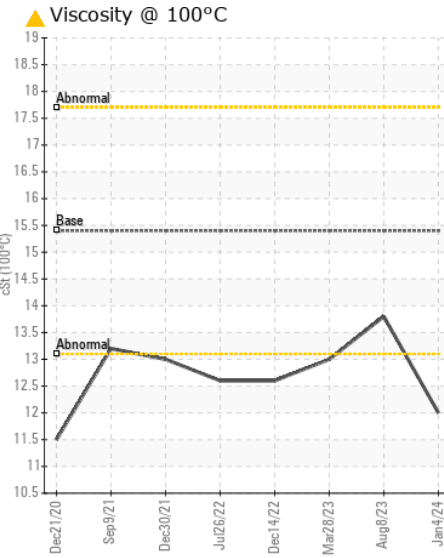
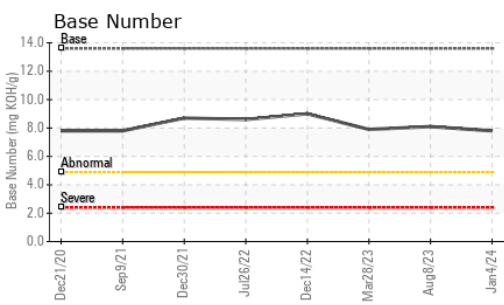
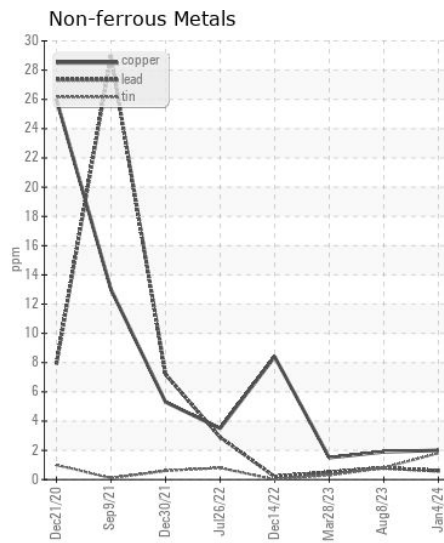
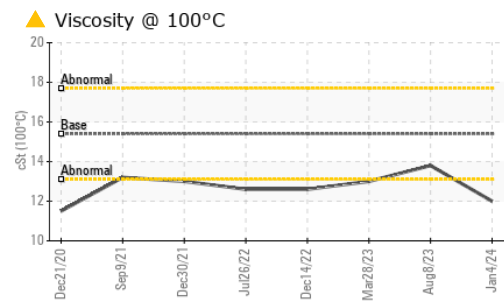
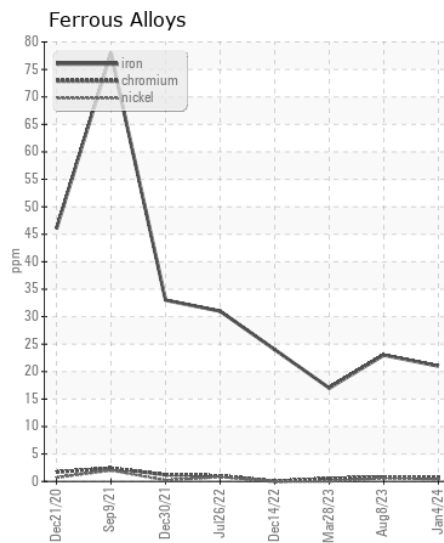
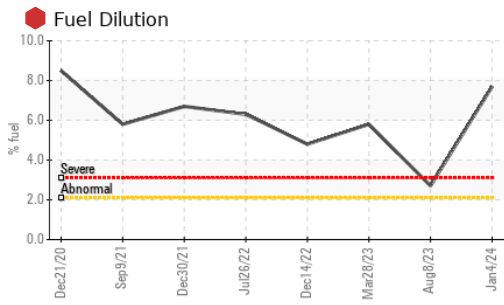
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>14</b>	15	13
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	2
Fuel	%	ASTM D3524	>2.1	<b>7.7</b>	2.7	5.8
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.9</b>	0.9	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.0</b>	12.1	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.5</b>	27.4	25.3
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>31	<b>3</b>	6	3
Boron	ppm	ASTM D5185m		<b>136</b>	126	181
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>238</b>	252	234
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>751</b>	852	730
Calcium	ppm	ASTM D5185m		<b>1255</b>	1476	1356
Phosphorus	ppm	ASTM D5185m		<b>728</b>	853	748
Zinc	ppm	ASTM D5185m		<b>942</b>	1089	963
Sulfur	ppm	ASTM D5185m		<b>2564</b>	3686	3096
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.9</b>	24.5	22.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.8</b>	8.1	7.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.0</b>	13.8	13.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0201463 **Received** : 16 Jan 2024  
**Lab Number** : 06061869 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10833251 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: PercentFuel, TBN )

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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